

**STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL**

In the Matter of:)	Docket No. I&SE 00/01-004
)	
BAY AREA DRUM SITE)	IMMINENT AND/OR SUBSTANTIAL
)	ENDANGERMENT DETERMINATION
1212 Thomas Avenue)	AND REMEDIAL ACTION ORDER
San Francisco, California)	
)	Health and Safety Code
)	Sections 25355.5(a)(1)(B),
)	25358.3(a), 25359.2,
)	58009(b) and 58010

I. INTRODUCTION

1.1 **Parties.** The State of California Department of Toxic Substances Control ("Department") issues this Imminent and/or Substantial Endangerment Determination and Remedial Action Order ("Order") to Freud F. Farley and Karl C. Kluck. Said parties are herein referred to as "Respondents".

1.2 **Site.** This Order applies to the property located at 1212 Thomas Avenue, in the City and County of San Francisco, California, and includes any nearby place where hazardous substances released at or from that property may have come to be deposited (the "Site"). A legal description and a map of the property located at 1212 Thomas Avenue, San Francisco, California ("the Property") are attached hereto as Exhibit A, and are incorporated herein by this reference.

1.3 **Jurisdiction.**

1.3.1 Section 25358.3(a) of the California Health and Safety Code ("H&SC") authorizes the Department to issue an Order when the Department determines that there may be an imminent or substantial endangerment to the public health or welfare or to the environment because of a release or a threatened release of a hazardous substance.

1.3.2 H&SC section 25355.5(a)(1)(B) authorizes the Department to issue an Order establishing a schedule for removing or remedying a release of a hazardous substance at

a site, or for correcting the conditions that threaten the release of a hazardous substance. The order may include, but need not be limited to, requiring specific dates by which the nature and extent of a release shall be determined and the site adequately characterized, a remedial action plan prepared and submitted to the Department for approval, and a removal or remedial action shall be completed.

1.3.3 H&SC section 25359.2 allows the imposition of administrative penalties for failure to comply with an order issued pursuant to H&SC sections 25358.3 or 25355.5.

1.3.4 H&SC sections 58009(b) and 58010 authorize the Department to commence and maintain all proper and necessary actions and proceedings to abate public nuisances related to matters within its jurisdiction.

II. FINDINGS OF FACT

The Department hereby makes the following Findings of Fact:

2.1 **Current Owners.** Respondents, Freud F. Farley and Karl C. Kluck, currently own the Property, and owned the Property at a time when the Department incurred costs responding to the release and threatened release of hazardous substances at and from the Property and at a time when hazardous substances were disposed of at the Property.

2.2 **Physical Description of the Property.** The Property is located on the northwest corner of the intersection of Thomas Avenue and Hawes Street in the Hunters Point District of San Francisco, California. The facility occupies approximately 30,000 to 35,000 square feet, one half of which is a former office/process building, and one half of which is a former drum storage yard. The Property is bordered by residential and vacant properties to the north, and by industrial properties to the northeast, east, south and west. The former office/process building is a warehouse with sheet-metal walls and ceiling. There is evidence that, in the past, one or more transients have gained access to the building and established living quarters inside. There are no internal walls within the building. Much of the floor of the building is covered with a concrete slab, but there are large uncovered areas and cracks and joints in the concrete where volatile gases could escape. The former drum storage yard is fenced and is capped with a gravel and chip seal surface.

2.3 Property History.

2.3.1 In or about 1948, the Bedini family constructed a drum reconditioning facility on the Property, which it operated until approximately 1965. From approximately 1965 to 1970, Myers Drum Company operated a drum reconditioning business at the Property through its affiliate Bay Area Drum Company (formerly known as A.W. Sorich Bucket and Drum Company). From approximately 1970 to 1978, Bedini Barrels, Inc. (aka Bedini Steel

Drum Corp.) operated a drum reconditioning business at the Property. From approximately 1978 to 1979, Waymire Drum Company, Inc. operated a drum reconditioning business at the Property in its own name, doing business as Bedini Steel Drum Corp., and through its former affiliate, Waymire Drum and Barrel Company, Inc. In or about 1980, the Bay Area Drum Company, Inc. ("Bay Area Drum") purchased the Property, and owned it until or about 1984. Bay Area Drum also began to operate a drum reconditioning business at the Property in 1980. In or about 1984, Freud Farley and Karl Kluck purchased the Property. Bay Area Drum continued to operate a drum reconditioning business at the Property until approximately 1987. The various drum reconditioning businesses operating at the Property received steel and plastic drums containing residues of aqueous wastes, organic chemicals, acids, oxidizers and oils from a variety of industrial, educational and government establishments. As part of the reconditioning process, the drums were flushed and recoated. Consequently, residual contents of the drums, as well as reconditioning chemicals, were released at, and ultimately from, the Property. Many of these drum residues and reconditioning chemicals are "hazardous substances," within the meaning of H&SC section 25316.

2.3.2 The San Francisco Department of Public Works ("SFDPW") inspected the Property in 1980; its records indicate that Bay Area Drum was cited by SFDPW for sewer parameter violations at the Property from approximately 1980 through 1986. (The violations cited included discharge of materials which were outside the acceptable range for chromium concentration, oil/grease concentration, pH, and chemical oxygen demand.) The Department first investigated the Property in or about July 1982, in response to a citizen complaint that hazardous waste was being dumped into the sewer system. Field testing of drum reconditioning waste waters indicated a pH between 1 and 2. An aqueous waste with a pH less than or equal to 2 is defined as a hazardous waste. California Code of Regulations ("CCR") sections 66261.20(a) and 66261.22(a)(1). In or about October 1983, the San Francisco Department of Public Health ("SFDPH") inspected the Property, in response to a citizen complaint regarding drums falling into the backyard of a residence and a vacant lot adjacent to the Property. In or about December 1983, the Department and the SFDPH inspected the Property and took soil and liquid samples at the Property and at other Site locations. Test results showed elevated levels of copper, lead, zinc, selenium, polychlorinated biphenyls ("PCBs") and solvents.

2.3.3 In or about July 1984, the Department issued a Notice of Violation to Bay Area Drum, requiring an investigation and cleanup of contaminated Site soils. On or about May 21, 1985, the Department obtained liquid and solid samples from process collection sumps at the Property. Testing of those samples revealed high concentrations of barium, cadmium, cobalt, chromium, copper, nickel and zinc. Concentrations of volatile organic solvents and pesticides were also found.

2.3.4 On or about June 13, 1986, the Department issued a Remedial Action Order to Responsible Parties, which ordered remedial investigation and remedial action. The parties named in that order were: Bay Area Drum Company, Inc., a California Corporation; Freud Farley, an individual; Karl Kluck, an individual; Ernest Bedini; Joseph Bedini; Myers Container Corporation; and Waymire Drum Company. The Department issued final Notices of Non-Compliance to the above parties in or about July 1986.

2.3.5 On or about June 30, 1987, the Department issued an Imminent and Substantial Endangerment ("I&SE") Determination due to high levels of chemical compounds detected at the Site, including PCBs, lead, and pesticides (chlordane and toxaphene).

2.3.6 The Department conducted an expedited response action ("ERA") at the Site in or about 1987 and 1988. The ERA entailed the partial removal and disposal of contaminated soil and stored waste materials from the Property, the partial removal and disposal of contaminated soil from the vacant lot and residences adjacent to the Property, the removal and disposal of buried drums from along the Property's northern fenceline adjacent to the vacant lot, capping of the Property's drum yard, and the fencing of that drum yard.

2.3.7 From 1988 to 1992, the Department conducted investigations of contamination remaining in Site soil and groundwater.

2.3.8 On March 14, 1996, a group of responsible parties ("Consent Order Respondents") entered into a Consent Order with the Department, Docket No. HSA 95/96-060, to conduct certain remedial and removal activities in response to the release and threatened release of hazardous substances at and from the Site. The Respondents subject to this Order did not enter into the Consent Order.

2.3.9 On April 4, 1996, the Department issued an I&SE Determination and Order, Docket No. I&SE 95/96-004, to the Respondents not party to the Consent Order, to conduct certain remedial and removal activities in response to the release and threatened release of hazardous substances at and from the Site. The Respondents subject to this Order were among the Respondents to whom the I&SE Order was issued.

2.3.10 Certain Consent Order Respondents have conducted remedial activities under the oversight of the Department since 1993. Since 1993, the Department has overseen the preparation of, and approved, final Remedial Investigation and Risk Assessment Reports. The Department has also reviewed and commented upon a draft Soil Removal Action Workplan, held a public meeting and comment period, and on December 22, 1998 approved a final Soil Removal Action Workplan, for the eight Shafter Avenue residential backyards adjacent to the Property. The Department has also reviewed and commented upon a draft Feasibility Study/Remedial Action Plan, held a public meeting and comment period, and approved a final Feasibility Study/Remedial Action Plan, for the remainder of

the Site (not subject to the Soil Removal Action Workplan). On August 14, 2000, DTSC approved the Final Feasibility Study/Remedial Action Plan for the Site. The Final Feasibility Study/Remedial Action Plan includes demolition of the Property's process building and boiler shed as a necessary action to implement the Plan.

2.4 Substances Found at the Site.

2.4.1 Pursuant to section 102 of CERCLA, 42 U.S.C. section 9602, and H&SC section 25316, a substance is a "hazardous substance" if it is listed in Title 40, Code of Federal Regulations ("CFR"), Section 302.4. The following substances, listed in 40 CFR section 302.4, have been detected in the soil at the Site, and require remediation in order to reach unrestricted residential levels: acetone; antimony; benzene; carbon tetrachloride; chlordane; chlorobenzene; chloroform; cyanide; 4,4-DDD; 1,1-dichloroethane; ethylbenzene; lead; mercury; nickel; polychlorinated biphenyls ("PCBs"); total carcinogenic polycyclic aromatic hydrocarbons ("total c-PAHs"); 1,1,2,2-tetrachloroethane; tetrachloroethene (a.k.a. perchloroethene); toxaphene; trichloroethene; xylenes; zinc. The only substance, listed in 40 CFR section 302.4, detected in the groundwater at the Site, and requiring remediation to protect ecological receptors is vinyl chloride (at 1 milligram per liter, compared to a groundwater restoration value of 0.3 milligram per liter).

2.4.2 Attached hereto as Exhibit B and incorporated herein by this reference is a table setting forth hazardous substances detected in Site soil that require remediation to reach levels safe for unrestricted residential use.

2.5 Health Effects.

2.5.1 **Acetone.** Acetone primarily affects the respiratory system and skin. Exposure symptoms include irritation of the eyes, nose and throat, headaches, dizziness and dermatitis.

2.5.2 **Antimony.** Antimony oxide is listed as a chemical known to the State of California to cause cancer pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986. Antimony and its compounds can cause dermatitis, keratitis, conjunctivitis and nasal septal ulceration by contact, fumes or dust.

2.5.3 **Benzene.** Benzene is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986. Symptoms of exposure to benzene include headache, dizziness, drowsiness and nausea; with high vapor concentrations, these symptoms may progress to convulsions, respiratory paralysis and death. Chronic, low level exposure to benzene can result in blood disorders such as aplastic anemia and leukemia.

2.5.4 **Carbon tetrachloride**. Carbon tetrachloride is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986. Symptoms of exposure to carbon tetrachloride include eye and skin irritation, and gastrointestinal upset. It is a human poison by ingestion. Prolonged exposure can result in kidney and liver damage. Carbon tetrachloride has a narcotic effect, and exposure to high concentrations can cause unconsciousness and prolonged exposure can cause death.

2.5.5 **Chlordane**. Chlordane is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986. Chlordane is used as an insecticide, and exposure symptoms include moderate irritation to skin. Poisoning may occur by ingestion, inhalation, or percutaneous absorption. Acute toxicity includes: irritability, convulsions, and deep depression. Continued ingestion may cause degenerative changes in the liver.

2.5.6 **Chlorobenzene**. Chlorobenzene is an inhalation and skin contact hazard.

2.5.7 **Chloroform (Trichloromethane)**. Chloroform is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986. Chloroform can irritate the skin and mucous membranes, and cause liver, heart and kidney damage. Chloroform is anesthetic. Prolonged inhalation of large doses may cause paralysis, cardiac and respiratory failure, and death.

2.5.8 **Cyanide**. Sodium cyanide is toxic by ingestion and inhalation. Potassium cyanide is toxic by ingestion, skin absorption and inhalation of hydrogen cyanide liberated by action of carbon dioxide or other acids. They are violent poisons. Hydrogen cyanide can cause headache, vertigo, nausea and vomiting at lower concentrations. Chronic exposure to low levels can cause fatigue and weakness. Higher concentrations can result in death.

2.5.9 **1,1-Dichloroethane ("1,1-DCA")**. 1,1-DCA is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. It is a central nervous system depressant in humans when inhaled at high concentrations. It may also be hepatotoxic (toxic to the liver) in humans. Human health effects associated with chronic inhalation of this compound include potential kidney and liver injury and lung irritation. 1,1-DCA is also a skin and eye irritant upon dermal contact.

2.5.10 **DDD (Dichlorodiphenyldichloroethane)**. DDD is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. A poison by ingestion, DDD is moderately toxic by skin contact.

2.5.11 **Ethylbenzene**. Symptoms of exposure to ethylbenzene include irritation to eyes, skin, and mucous membranes. In high concentrations, it is narcotic. It is toxic by ingestion, inhalation and skin absorption.

2.5.12 **Lead**. Lead is listed as a chemical known to the State to cause cancer and reproductive toxicity pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. Short term exposure to lead can cause fatigue, sleep disturbance, headache, aching bones and muscles, constipation, abdominal pains, decreased appetite and reversible kidney damage. Chronic lead exposure can lead to irreversible vascular sclerosis, irreversible brain damage, tubular cell atrophy, interstitial fibrosis, and glomerular sclerosis. Prolonged exposure at high concentrations may result in progressive kidney damage and possibly kidney failure. Anemia is an early sign of lead poisoning. Exposure to lead can produce neurobiological defects in children such as learning disabilities and behavioral problems.

2.5.13 **Mercury**. Mercury is listed as a chemical known to the State to cause reproductive toxicity pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. Highly toxic by skin absorption and inhalation of fume or vapor, absorbed by respiratory and intestinal tracts. Acute effects of exposure to mercury include: vomiting, abdominal pain, bloody diarrhea, kidney damage, and death. Chronic effects include: inflammation of mouth and gums, excessive salivation, loosening of teeth, kidney damage, muscle tremors, jerky gait, spasms of extremities, personality changes, depression, irritability, and nervousness.

2.5.14 **Nickel**. Nickel and certain nickel compounds are listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. Nickel can cause dermatitis, pulmonary asthma and conjunctivitis.

2.5.15 **Polychlorinated Biphenyls ("PCBs")**. PCBs are listed as a chemical known to the State to cause cancer and reproductive toxicity pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. PCBs can cause liver damage, skin pigmentation changes and chloracne. Irritation of the eyes, nose, and throat may also occur. Systemic effects are usually dependent upon the degree of chlorination - the higher the degree, the stronger the effects. PCBs are known to bioaccumulate in human and animal tissues.

2.5.16 **Polycyclic Aromatic Hydrocarbons ("PAHs")**. PAHs are group of hydrocarbons typically represented by benzo(a)pyrene. Benzo(a)pyrene is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. Benzo(a)pyrene is highly toxic, and a carcinogen by inhalation.

2.5.17 **1,1,2,2-Tetrachloroethane**. 1,1,2,2-Tetrachloroethane is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. It is a powerful narcotic and a liver poison, and is toxic by ingestion, inhalation and skin absorption. Exposure symptoms include eye and skin irritation, and gastrointestinal upset.

2.5.18 **Tetrachloroethene (Perchloroethene, "PCE")**. PCE is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. Short-term exposure to PCE through ingestion and inhalation may cause nausea, vomiting, headache, dizziness, drowsiness, and tremors. Skin contact with PCE causes irritation and blistering. Liver and kidney toxicity are long-term effects.

2.5.19 **Toxaphene**. Toxaphene is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. Toxaphene is used as an insecticide, and is toxic by ingestion, inhalation and skin absorption. It can cause mild skin irritation, central nervous system stimulation with tremors, convulsions, and death.

2.5.20 **Trichloroethene ("TCE")**. TCE is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. Acute exposure to TCE causes headache, dizziness, vertigo, tremors, irregular heartbeat, fatigue, nausea, vomiting, and blurred vision. TCE vapors may cause irritation of the eyes, nose, and throat. Long-term effects may include liver and kidney damage.

2.5.21 **Vinyl Chloride**. Vinyl chloride is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking water and Toxic Enforcement Act of 1986. Inhalation of vinyl chloride causes headache, dizziness, abdominal pain, numbness, and tingling of the extremities. Vinyl chloride vapors cause eye irritation and may cause skin irritation. Long term effects of vinyl chloride exposure include liver damage and liver cancer. There is evidence that vinyl chloride causes mutagenicity.

2.5.22 **Xylenes**. Xylenes may be narcotic in high concentrations.

2.5.23 **Zinc**. Zinc is an irritant, causing throat dryness, coughing, fatigue, aches, chills, fever, nausea, and vomiting.

2.6 Routes of Exposure.

2.6.1 People working or living (e.g. as unauthorized transients) inside the Property's process building could be exposed to contaminants via dermal contact or via inhalation of volatile or dust-borne contaminants. Excavation of soil in the areas where contamination exists, could expose workers and nearby residents to contamination via dermal contact or via inhalation of contaminants, either from soil or groundwater.

2.6.2 If contaminated groundwater migrates to the proposed Candlestick Park wetlands restoration area (located downgradient from the Property and adjacent to Yosemite Creek), sensitive species may be exposed to contaminants via contact, inhalation and/or ingestion of contaminated water and/or plants.

2.7 Public Health and/or Environmental Risk.

2.7.1 The public at risk includes those people who work or live (as transients) inside the Property's process building, those who excavate into contaminated soil or groundwater, and/or persons who otherwise come into contact with, inhale or ingest contaminated air, soil or groundwater.

2.7.2 The Property is approximately 1,000 feet upgradient from the proposed Candlestick Park wetlands restoration area. The potential exists for contaminated groundwater to migrate to Yosemite Creek, and consequently discharge into the proposed wetlands area. The risk to the environment includes sensitive species (which may include threatened or endangered species) that may reside in the proposed wetlands area adjacent to Yosemite Creek.

III. CONCLUSIONS OF LAW

The Department hereby makes the following Conclusions of Law:

3.1 Each of the Respondents is a "responsible party" or "liable person," as defined by H&SC sections 25319, 25323.5 and 25385.1(g).

3.2 Each of the substances listed in Section 2.4 of this Order is a "hazardous substance," as defined by H&SC section 25316, and has been found at the Site.

3.3 A "release" or "threatened release" of the hazardous substances listed in section 2.4 of this Order has occurred at the Site, and the further "release" of those hazardous substances from the site is "threatened," within the meaning of H&SC section 25320.

3.4 The actual and/or threatened release of hazardous substances at or from the Site may

present an imminent and/or substantial endangerment to the public health or welfare or to the environment.

3.5 The actual or threatened release of hazardous substances at or from the Site is injurious to public health, or is an obstruction to the free use of property, which, at the same time, affects the entire community where the Site is located, and thus constitutes a "public nuisance" as defined by California Civil Code sections 3479 and 3480.

IV. DETERMINATIONS

Based on the foregoing Findings of Fact and Conclusions of Law, the Department hereby makes the following Determinations:

4.1 Response action is necessary at the Site because there has been a release and/or threatened release of a hazardous substance.

4.2 Response action is necessary at the Site because there may be an imminent and/or substantial endangerment to the public health or welfare or to the environment, because of the release and/or threatened release of the hazardous substances at the Site.

4.3 Response action is necessary at the Site to abate a public nuisance.

V. ORDER

Based on the foregoing Findings of Fact, Conclusions of Law and Determinations, the Department orders Respondents to conduct the following response activities, in the manner and in accordance with the schedule specified herein:

5.1 **Removal of Material, Equipment and/or Debris.** Respondents shall remove all above-ground material, equipment and/or debris within 10 calendar days of issuance of the Order.

5.2 **Demolition of Structures.** Respondents, as the owners of the property, shall implement the portion of the RAP which requires demolition of the structures currently onsite. Specifically, Respondents are ordered to do the following:

(a) Within 10 calendar days, submit a plan for demolition of the Property's process building, including the adjoining boiler shed, to the Department.

(b) Within 10 calendar days, submit an application to the City and County of San Francisco for demolition of the Property's process building, including the adjoining boiler shed. The application should not include replacement with a new structure(s).

A copy of the application and acknowledgment of the receipt of the application must be provided to the Department within 15 days.

(c) Within 30 calendar days of approval of the demolition plan by the Department and issuance of a demolition permit by the City and County of San Francisco, demolish the structures on the Site. All structure debris is to be removed off-site and properly recycled or disposed.

5.3 Fence and Post.

5.3.1 Upon completion of the demolition activities, Respondents shall install a fence in accordance with the specifications attached as Exhibit C. At no time shall the property remain unsecured. The fence shall secure, at a minimum, the areas specified on the Site map (Exhibit A).

5.3.2 Respondents shall install signs which are visible from the area surrounding the contaminated Site and posted at each route of entry into the Site, including those routes likely to be used by unauthorized persons. The signs shall be in accordance with the specifications attached as Exhibit C.

5.3.3 The fence and signs shall be constructed of materials able to withstand the elements and shall be continuously maintained for as long as the hazardous materials and contamination remain on the Site.

5.4 **Consistency with Applicable Law.** All work performed under this Order shall be consistent with and based on the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") (42 U.S.C. sections 9601 et seq., as amended; the National Contingency Plan, 40 CFR Part 300, as amended; the Hazardous Substance Account Act ("HSAA"), H&SC sections 25300 et seq., as amended; all applicable safety regulations including, but not limited to, 29 CFR section 1910.120 and Title 8, California Code of Regulations, section 5192; state laws and regulations, as amended; and other current and applicable United States Environmental Protection Agency ("U.S. EPA") and Department guidance and standards.

5.5 **Stop Work Order.** In the event that the Department determines that any activity at the Site (whether or not pursued in compliance with this Order) may pose an imminent or substantial endangerment to the health or safety of people on the Site or in the surrounding area or to the environment, the Department may order Respondents to stop further implementation of this Order for the period of time needed to abate the endangerment. In the event that the Department determines that any Site activities (whether or not pursued in compliance with this Order) are proceeding without Department authorization, the Department may order Respondents to stop further implementation of this Order or activity

for the period of time needed to obtain Department authorization, if such authorization is appropriate. Any deadline in this Order directly affected by a Stop Work Order, under this section, shall be extended for the term of the Stop Work Order.

5.6 Emergency Response Action/Notification.

5.6.1 In the event of any action or occurrence at the Site (such as a fire, earthquake, explosion, or human exposure to hazardous substances caused by the release or threatened release of a hazardous substance at or from the Site), during the course of this Order, that poses or may pose an immediate threat to the health or safety of people at the Site or in the surrounding area, or to the environment, Respondents shall immediately take all appropriate action to prevent, abate, or minimize that threat, and shall immediately notify the Department's Project Manager for the Site. Respondents shall take such action in consultation with the Project Manager and in accordance with all applicable provisions of this Order. Within seven days of the onset of such action or occurrence, Respondents shall furnish a report to the Department, signed by the Respondents' Project Coordinator, setting forth the events which occurred and the measures taken in the response thereto.

5.6.2 Nothing in section 5.6.1 of this Order shall be deemed to limit any other notification requirement to which Respondents may be subject.

VI. GENERAL PROVISIONS

6.1 **Project Coordinator.** Within 10 days from the date this Order is issued by the Department, Respondents shall submit to the Department in writing the name, address, and telephone number of a Project Coordinator whose responsibilities will be to receive all notices, comments, approvals, and other communications from the Department. Respondents shall promptly notify the Department of any change in the identity of the Project Coordinator.

6.2 **Project Engineer.** The work performed pursuant to this Order shall be under the direction and supervision of a qualified professional engineer with expertise in hazardous substance site cleanup. Within 10 calendar days from the date this Order is issued by the Department, Respondents shall submit to the Department: a) The name and address of the project engineer chosen by the Respondents; and b) in order to demonstrate expertise in hazardous substance cleanup, the résumé of the engineer, and the statement of qualifications of the consulting firm responsible for the work. Respondent(s) shall promptly notify the Department of any change in the identity of the Project Engineer.

6.3 **Submittals.** All submittals and notifications from Respondents required by this Order shall be sent simultaneously to:

Barbara J. Cook, P.E., Chief
Northern California Coastal Cleanup Operations Branch
Attention: Bill Brown
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Steve Morse
Attention: Mark Johnson
Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

Dr. Rajiv Bhatia
Medical Director, Bureau of Environmental Health
San Francisco Department of Public Health
1390 Market Street, Suite 822
San Francisco, California 94102

The Department will notify Respondents of any change in the above list.

6.4 **Communications.** All approvals and decisions of the Department made regarding submittals and notifications required under this Order will be communicated to Respondents in writing by the Northern California Coastal Cleanup Operations Branch Chief, Department of Toxic Substances Control, or his/her designee. No informal advice, guidance, suggestions or comments by the Department regarding reports, plans, specifications, schedules or any other writings by Respondents shall be construed to relieve Respondents of their obligation to obtain such formal approvals as may be required.

6.5 **Department Review and Approval.**

6.5.1 If the Department determines that any report, plan, schedule or other document submitted for approval pursuant to this Order fails to comply with this Order or fails to protect public health or safety or the environment, the Department may:

- (a) Modify the document as deemed necessary and approve the document as modified; or
- (b) Return comments to Respondents with recommended changes and a date

by which Respondents must submit to the Department a revised document incorporating the recommended changes.

6.5.2 Any modifications, comments or other directive issued by the Department pursuant to section 6.5.1 of this Order are incorporated into this Order. Any noncompliance with these modifications, comments or directives shall be deemed a failure or refusal to comply with this Order.

6.6 **Compliance with Applicable Laws.** Respondents shall carry out this Order in compliance with all applicable state, local, and federal requirements including, but not limited to, requirements to obtain permits and to assure worker safety.

6.7 **Department's Reservation of Rights.**

6.7.1 Nothing in this Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current or future operations of Respondents. The Department expressly reserves all rights, claims and defenses with respect to any legal obligations imposed on Respondents as a result of the release or threatened release of hazardous substances at and from the Site.

6.7.2 Nothing in this Order is intended or shall be construed to prevent the Department, prior to the time Respondents complete all of the requirements of this Order, from issuing other and further orders to the Respondents pursuant to the Department's authority under the California Health and Safety Code. Nothing in this Order is intended or shall be construed to prevent the Department from issuing any other and further order to Respondents once Respondents have completed all their obligations under this Order.

6.7.3 The Department contends that Respondents, among others, are liable for all of the costs that the Department has incurred prior to the date the Department issues this Order, and will incur thereafter, responding to the contamination at the Site (including costs incurred by the Department overseeing response work performed and to be performed by Respondents or other Potentially Responsible Parties). The Department expressly reserves its right to seek recovery of such costs pursuant to CERCLA, H&SC section 25360 or any other applicable federal or state statute or common law cause of action.

6.7.4 Nothing in this Order is intended or shall be construed to limit the Department's rights with respect to claims arising out of or relating to the deposit or disposal at any other location of substances removed from the Site.

6.7.5 Nothing in this Order is intended or shall be construed to limit or preclude the Department from taking any action authorized by law to protect public health or safety or the environment and recovering the cost thereof.

6.8 Site Access. Access to the Site shall be provided at all reasonable times to employees, contractors, and consultants of the Department. Nothing in this section is intended or shall be construed to limit in any way the right of entry or inspection that the Department or any other agency may otherwise have by operation of any law.

6.9 Site Access for Other Responsible Parties. Respondents shall grant access to the property to the Responsible Parties who are conducting remedial activities at the Site, for the purpose of conducting activities deemed necessary by the Department for implementation of the final Remedial Action Plan for the Site, dated August 1, 2000 and implementation of the final Soil Removal Action Workplan for the Eight Shafter Avenue Backyards, dated December 22, 1998.

6.10 Sampling, Data and Document Availability. Respondents shall permit the Department and its authorized representatives to inspect and copy all sampling, testing, monitoring or other data generated by Respondents or on Respondents' behalf in any way pertaining to work undertaken pursuant to this Order. Respondents shall submit all such data upon the request of the Department. Copies shall be provided within 20 days of receipt of the Department's written request. Respondents shall inform the Department at least 5 days in advance of any field activities under this Order. Respondents shall maintain a central depository of the data, reports, and other documents prepared pursuant to this Order.

6.11 Record Retention. All such data, reports and other documents prepared pursuant to this Order shall be preserved by Respondents for a minimum of ten years after the conclusion of all activities under this Order. If the Department requests that some or all of these documents be preserved for a longer period of time, Respondents shall either comply with that request, deliver the documents to the Department, or permit the Department to copy the documents prior to destruction. Respondents shall notify the Department, in writing, at least six months prior to destroying any documents prepared pursuant to this Order.

6.12 Government Liabilities. The State of California shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by Respondents, or by any of the related parties specified in section 6.23 of this Order, in carrying out activities pursuant to this Order, nor shall the State of California be held as party to any contract entered into by Respondents or its agents in carrying out activities pursuant to this Order.

6.13 Additional Actions. By issuing this Order, the Department does not waive the right to take any further action authorized by law.

6.14 Extension Requests. If Respondents are unable to perform any activity or submit any document within the time required by this Order, Respondents may, prior to expiration of the time, request an extension of the time in writing. The extension request shall include a justification for the delay. All such requests shall be made in advance of the date on which the activity or document is due.

6.15 Extension Approvals. If the Department determines that good cause exists for an extension requested by Respondents pursuant to section 6.16 of this Order, it will grant the request and specify a new schedule in writing. Respondents shall comply with said new schedule, which shall be deemed to be incorporated in this Order.

6.16 Cost Recovery. The Respondents are liable for all of the Department's costs incurred in responding to the contamination at the Site (including costs of overseeing response work performed by the Respondents) and costs to be incurred in the future. Cost recovery may be pursued by the Department under CERCLA, Health and Safety Code section 25360, or any other applicable state or federal statute or common law.

6.17 Severability. The requirements of this Order are severable, and Respondents shall comply with each and every provision hereof, notwithstanding the effectiveness of any other provision.

6.18 Incorporation of Plans, Schedules and Reports. All plans, schedules, reports, specifications and other documents that are submitted by Respondents pursuant to this Order are incorporated in this Order upon the Department's approval, or its approval as modified pursuant to section 6.7 of this Order, and shall be implemented by Respondents. Any noncompliance with the documents incorporated in this Order shall be deemed a failure or refusal to comply with this Order.

6.19 Modifications. The Department reserves the right to unilaterally modify this Order. Any modification to this Order shall be effective upon the date the modification is issued by the Department and shall be deemed incorporated in this Order.

6.20 Time Periods. Unless otherwise specified, time periods begin from the effective date of this Order and "days" means calendar days. The effective date of this Order is the date the Order is issued by the Department.

6.21 Termination and Satisfaction. The Respondents' obligations under this Order, except for the Respondents' obligation to pay all past and future costs incurred by the Department in responding to the contamination at the Site pursuant to sections 5.15, Five-Year Review; 6.18, Cost Recovery; and 6.19, Future Costs, shall terminate and be deemed satisfied upon Respondents' receipt of written notice from the Department that the Respondents have complied with all the terms of this Order.

6.22 **Parties Bound.** This Order applies to and is binding upon Respondents, and their officers, directors, agents, employees, contractors, consultants, receivers, trustees, successors and assignees, including but not limited to individuals, partners, and subsidiary and parent corporations, and upon the Department or any successor agency of the State of California that may have responsibility for and jurisdiction over the subject matter of this Order.

VII. PENALTIES AND PUNITIVE DAMAGES FOR NONCOMPLIANCE

7.1 The Department has the authority, pursuant to H&SC section 25359.2, to seek penalties of up to \$25,000 per day for any failure or refusal to comply with an order it issues pursuant to H&SC sections 25355.5 and 25358.3. The Department also has the authority, pursuant to H&SC section 25359.2, to seek punitive damages of up to three times the amount of any costs it incurs as a result of a failure to comply with an order it issues pursuant to H&SC section 25358.3.

7.2 Health and Safety Code Section 25359.3 provides that a responsible party who complies with this Order, or with another order or agreement concerning the same response actions required by this Order, may seek treble damages from any person named in this Order, or in such other order or agreement, who is subject to contribution and who fails or refuses to comply with this Order or such other order without sufficient cause.

Date of Issuance: 01/17/01

Original signed by
Barbara J. Cook, P.E., Chief
Northern California Coastal Cleanup Operations Branch
Department of Toxic Substances Control

cc: Site Mitigation Program
Headquarters, Planning & Policy

Office of Legal Counsel

Exhibit A

Legal Description of the Property: "Beginning at the point of intersection of the northeasterly line of Thomas Avenue and the northwesterly line of Hawes Street; running thence northwesterly and along said line of Thomas Avenue 300 feet; thence at a right angle northeasterly 100 feet; thence at a right angle southeasterly 300 feet to the northwesterly line of Hawes Street; and thence at a right angle southwesterly along said line of Hawes Street 100 feet to the point of beginning."

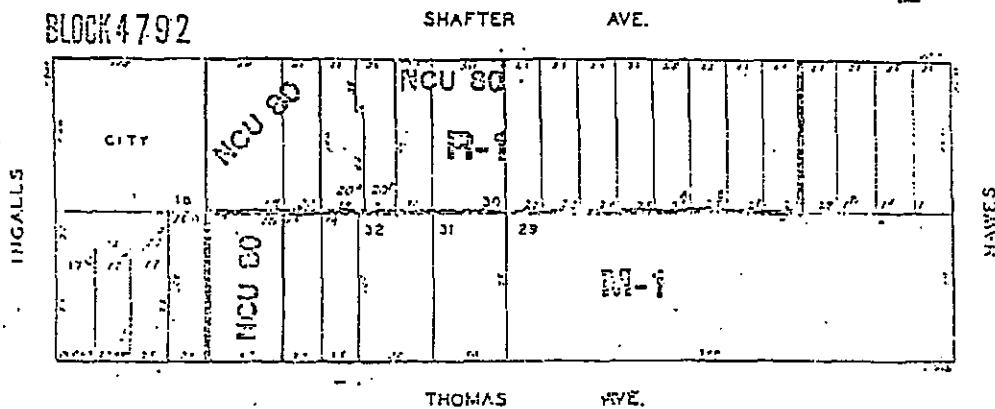


EXHIBIT B

SUBSTANCES DETECTED IN SITE SOIL AND GROUNDWATER BAY AREA DRUM SITE

Table 1 lists hazardous substances detected in Site soil that require remediation to reach levels suitable for unrestricted residential land use.

TABLE 1

SUBSTANCES DETECTED IN SOIL REQUIRING REMEDIATION	RANGE OF CONCENTRATIONS IN MG/KG¹	STEG² IN PPM
Acetone	ND ³ to 7.6	3
Antimony	ND to 200	33
Benzene	ND to 14	1.3
Carbon tetrachloride	ND to 47	0.88
Chlordane	ND to 125	NC
Chlorobenzene	ND to 8	4
Chloroform	ND to 7	6
Cyanide	ND to 34	8
4,4-DDD	ND to 200	2.4
1,1-Dichloroethane	ND to 25	23
Ethylbenzene	ND to 86	30
Lead	ND to 52,200	400
Mercury	ND to 22	0.83
Nickel	ND to 1,700	330
PCBs	ND to 2,600	2
Total c-PAHs	NA	NC
1,1,2,2-Tetrachloroethane	ND to 32	NC
Tetrachloroethene	ND to 930	5

SUBSTANCES DETECTED IN SOIL REQUIRING REMEDIATION	RANGE OF CONCENTRATIONS IN MG/KG ¹	STEG ² IN PPM
Toxaphene	ND to 2,200	NC
Trichloroethene	ND to 980	12
Xylenes	ND to 280	100
Zinc	ND to 67,300	960

1. Milligrams per kilogram (parts per million or ppm); concentrations prior to excavation activities.
 2. Soil Target Excavation Goals developed for lead, PCBs and substances that will remain after excavation for lead and PCBs (values may vary, except for lead and PCBs, however the overall goal is to attain a total potential excess cancer risk of less than one in 100,000 (1×10^{-5}) and a total potential noncancer hazard index equal to or less than one). The STEG for lead is 400 mg/kg not to exceed 840 mg/kg; STEG for PCBs is 2 mg/kg not to exceed 4 mg/kg.
 3. Non-detect
- NC: Not calculated. STEGs were not calculated for substances that will not remain after excavation for lead and PCBs.
- NA: Not available. Concentrations available for individual carcinogenic PAHs in Table 6, *Remedial Investigation Report*, December 1999, Harding Lawson Associates.

EXHIBIT C

STANDARD FENCE SPECIFICATIONS

The fence shall be a standard chain link fence with a height of six feet, topped with a minimum of three strands of barbed wire. The wiring of the fencing shall be 11 gauge and woven into an approximately two-inch mesh. The fencing should have a knuckled finish on the top and bottom edges. The posts are to be made of galvanized metal, and shall be spaced no more than ten feet apart. Any access gates are to be of the same material as the fence, and shall be secured with a padlock.

SIGN SPECIFICATIONS

The following are specifications for warning signs which must be posted in accordance with a Fence and Post Order:

1. All lettering shall be legible from a distance of 25 feet.
2. The signs shall read: "Caution: Hazardous Substance Area; Unauthorized Persons Keep Out", and shall provide the name and phone number for the Department's Berkeley Regional Office: (510) 540-2122.
3. The signs shall also provide the warning in number 2 above in a second language which is appropriate to the local area (at this Site, Spanish would be appropriate). In addition, the sign shall have the international "Do Not Enter" symbol.
4. The signs shall be visible from the surrounding area and posted, at a minimum, at intervals of every 200 feet around the perimeter of the fence, and at every actual or likely point of entry.